

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. By the present amendment, claims 46, 48, 49 and 56 are being amended, and new claims 57 and 58 are being added. Claims 46-58 are pending in the application.

Listing of Claims:

46. (*Currently Amended*) An MRI system for obtaining an image relating to fluid region to be imaged of an object, comprising:

a cardiac phase setting component configured to set a first cardiac phase and a second cardiac phase of a cardiac cycle of the object as first and second timings;

a scanning component configured to perform a first 3D scan at the first timing to acquire a first echo data set and a second 3D scan at the second timing to acquire a second echo data set, at least one of the first 3D scan and the second 3D scan being performed with a gradient magnetic field including a dephase pulse; and

an image producing component configured to produce a subtraction image from a first image and a second image, the first image being generated based on the first echo data set, and the second image being generated based on the second echo data set.

47. (*Previously Presented*) The MRI system of claim 46, wherein the first cardiac phase corresponds to a diastole and the second cardiac phase corresponds to a systole.

48. *(Currently Amended)* The MRI system of claim 46, wherein ~~the~~ slice encodes for the first and second 3D scans have the same amount.

49. *(Currently Amended)* The MRI system of claim 47, wherein ~~the~~ slice encodes for the first and second 3D scans have the same amount.

50. *(Previously Presented)* The MRI system of claim 46, wherein the second 3D scan is performed based on a pulse sequence, which has a flow dephasing pulse in a read-out direction.

51. *(Previously Presented)* The MRI system of claim 46, wherein the second 3D scan is performed based on a pulse sequence which has a readout gradient pulse for reading out the second echo data set and a flow dephasing pulse added to the readout gradient pulse.

52. *(Previously Presented)* The MRI system of claim 47, wherein the second 3D scan is performed based on a pulse sequence which has a readout gradient pulse for reading out the second echo data set and a flow dephasing pulse for controlling magnetic spins of the fluid.

53. *(Previously Presented)* The MRI system of claim 46, wherein the first and second 3D scans are performed under a condition in which the direction of the readout gradient pulse substantially corresponds to a blood vessel direction to be imaged.

54. *(Previously Presented)* The MRI system of claim 46, wherein the first and second 3D scans are performed based on FSE (Fast Spin Echo) technique.

55. *(Previously Presented)* The MRI system of claim 46, wherein the subtraction is a weighted subtraction.

56. *(Currently Amended)* An MR imaging method of obtaining an image relating to fluid within a region to be imaged ~~on~~ of an object, comprising:

performing, with respect to the region, a preparation scan for acquiring echo data sets at cardiac phases at a same slice position;

producing preparation image sets at the cardiac phases based on the echo data sets;

determining a first preparation image and a second preparation image from the preparation image sets;

performing, toward the region, a first 3D imaging scan at a first cardiac phase and a second 3D imaging scan at a second cardiac phase, a first echo data set being acquired at the first cardiac phase, a second echo data set being acquired at the second

cardiac phase, at least one of the first 3D imaging scan and the second 3D imaging scan being performed with a gradient magnetic field including a dephase pulse; and

producing a subtraction image from a first image and a second image, the first image being generated based on the first echo data set, the second image being generated based on the second echo data set.

57. (New) An MRI system for obtaining an image relating to fluid region to be imaged of an object, comprising:

a time phase setting component configured to set a first time phase and a second time phase of a pulse wave of the object as first and second timings;

a scanning component configured to perform a first 3D scan at the first timing to acquire a first echo data set from an inferior limb and a second 3D scan at the second timing to acquire a second echo data set from the inferior limb; and

an image producing component configured to produce a subtraction image from a first image and a second image, the first image being generated based on the first echo data set, the second image being generated based on the second echo data set.

58. (New) An MR imaging method of obtaining an image relating to fluid within a region to be imaged of an object, comprising:

performing, with respect to the region, a preparation scan for acquiring echo data sets from an inferior limb at time phases of a pulse wave of the object at a same slice position;

producing preparation image sets at the time phases based on the echo data sets;

determining a first preparation image and a second preparation image from the preparation image sets;

performing, toward the region, a first 3D imaging scan at a first time phase and a second 3D imaging scan at a second time phase, the first echo data set being acquired from the inferior limb at the first time phase, a second echo data set being acquired from the inferior limb at the second time phase; and

producing a subtraction image from a first image and a second image, the first image being generated based on the first echo data set, the second image being generated based on the second echo data set.